

REMARKS

The claims are 1 to 30.

The above amendment is responsive to points set forth in the Official Action.

With regard to the rejections of claims 15 and 16 as lacking antecedent basis, this has been corrected by making claims 15 and 16 depend on claim 14.

Claims 1 and 18 have been amended to insert the feature of component (F). Support is evident from the disclosure of page 30 e.g. lines 26 to 30 of the present specification.

The significance of this feature will be discussed below.

Claims 1 to 13 and 17 to 30 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Mitsunaga et al. (JP 2001-323149).

Further, claims 14 to 16 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Mitsunaga et al. (JP 2001-323149) as applied to claim 1 above, and further in view of Hiraishi et al. (WO 2002/099474).

These rejections are respectfully traversed.

A brief discussion of the present invention will be of assistance in appreciating Applicants' reasons for traversal of rejection.

The light diffusion sheet of the present invention contains substantially no hindered phenol compound (component F). The light diffusion sheet has excellent brightness (page 30, lines 12 to 30 of the present specification).

On the contrary, the composition of Mitsunaga et al. contains 0.001-1.0 parts by weight of hindered phenol compound. Mitsunaga et al. states that when the content of hindered phenol compound is less than 0.001 parts by weight, a dry heat color change resistance or a melt color change resistance are deteriorated (paragraph [0066]). This passage is a disincentive to arrive at the present invention.

In comparing Example 19 and Comparative Example 4 of the present specification, the brightness of light diffusion sheet is deteriorated if the composition contains hindered phenol compound. The light diffusion sheet of Example 19 contains ADEKASTAB PEP-8 (Distearyl Pentaerythritol Diphosphite). The light diffusion sheet of Comparative Example 4 contains

IRGANOX 1010 (Pentaerythritol tetrakis [3-(3,5-di-t-butyl-4-hydroxyphenyl)propionate]).

Other components are the same in both compositions. The comparative table is shown below.

The light diffusion sheet of Example 19 has an average brightness of 5690. The light diffusion sheet of Comparative Example 4 has an average brightness of 5590. The difference of average brightness is 100. The brightness of Example 19 is essentially the same as Examples 20 to 22. The brightness of Comparative Example 4 is apparently lower than these Examples.

			Example 19	Comparative Example 4
	PC (A)	Mv = 23900	96.5	96.5
Component (Parts by weight)	Fine particles (B)	PARALOID EXL5136	3.5	3.5
	Heat stabilizer (C)	ADEKASTAB PEP-8	0.1	-
		Trimethyl Phosphate	0.05	0.05
	Ultraviolet absorber (D)	CHEMISORB 79	0.27	0.27
	Fluorescent whitening agent (E)	KAYALIGHT OS (Benzoxazole based)	0.02	0.02
	Hindered phenol (F)	IRGANOX 1010 (Comparison)	-	0.1
Evaluation Results	Average brightness	cd/m ²	5690	5590
	Total Light Transmittance	%T	55	54
	Diffusibility	°	47	47
	Weather Resistance	Initial YI	4.4	4.7
		YI after 250 hrs. Initial YI (= ΔYI)	4.1	4.2

The light diffusion sheet of the present invention has excellent brightness. Mitsunaga et al. is silent about an improvement of brightness.

Those skilled in the art could not arrive at the light diffusion sheet as presently claimed, containing substantially no hindered phenol compound having excellent brightness, light diffusibility and weather resistance.

The present light diffusion sheet having a protective film is also unobvious from Mitsunaga et al. in view of Hiraishi et al., even if Hiraishi et al. discloses a protective film.

There is nothing in Hiraishi et al. which overcomes the above-discussed deficiencies of Mitsunaga et al.

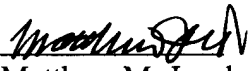
An English language version of the International Preliminary Report on Patentability is submitted herewith for the Examiner's consideration.

No further issues remaining, allowance of this application is respectfully requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact undersigned at the telephone number below.

Respectfully submitted,

Isao SOGO et al.

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April 10, 2008

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION OF TRANSMITTAL
OF COPIES OF TRANSLATION
OF THE INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY
(CHAPTER I OR CHAPTER II
OF THE PATENT COOPERATION TREATY)
(PCT Rules 44bis.3(c) and 72.2)

To:

OHSIMA, Masataka
Ohshima Patent Office
Fukuya Bldg.
3, Yotsuya 4-chome
Shinjuku-ku, Tokyo 160-0004
JAPON



Date of mailing (day/month/year) 11 May 2006 (11.05.2006)	
Applicant's or agent's file reference G56KASEI	IMPORTANT NOTIFICATION
International application No. PCT/JP2004/008766	International filing date (day/month/year) 16 June 2004 (16.06.2004)
Applicant TEIJIN CHEMICALS LTD. et al	

1. Transmittal of the translation to the applicant.

The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter I).



The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

2. Transmittal of the copy of the translation to the designated or elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

None

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, EP, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

The International Bureau of WIPO
34, chemin des Colombettes
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PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference G56KASEI	FOR FURTHER ACTION	See item 4 below
International application No. PCT/JP2004/008766	International filing date (<i>day/month/year</i>) 16 June 2004 (16.06.2004)	Priority date (<i>day/month/year</i>) 17 June 2003 (17.06.2003)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant TEJIN CHEMICALS LTD.		

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).																								
2.	This REPORT consists of a total of 5 sheets, including this cover sheet. In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.																								
3.	<p>This report contains indications relating to the following items:</p> <table style="width: 100%;"> <tr> <td style="width: 10%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 30%;">Box No. I</td> <td style="width: 60%;">Basis of the report</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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<input type="checkbox"/>	Box No. VIII	Certain observations on the international application																							
4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).																								

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Date of issuance of this report 01 May 2006 (01.05.2006) Authorized officer <div style="text-align: center; font-weight: bold; font-size: 1.2em;">Masashi Honda</div>
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PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

TRANSLATION
PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing
(day/month/year) **19.10.2004**

Applicant's or agent's file reference

G56KASEI

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/JP2004/008766

International filing date (day/month/year)

16.06.2004

Priority date (day/month/year)

17.06.2004

International Patent Classification (IPC) or both national classification and IPC

(IPC) Int. C17 G02B5/02, G02F1/13357, C08L69/00.

Applicant

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/

Authorized officer

Facsimile No.

Telephone No.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2004/008766

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/JP2004/008766

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims <u>1-30</u>	YES
	Claims _____	NO
Inventive step (IS)	Claims <u>14-16</u>	YES
	Claims <u>1-13, 17-30</u>	NO
Industrial applicability (IA)	Claims <u>1-30</u>	YES
	Claims _____	NO

2. Citations and explanations:

Document 1: JP 2001-323419 A (Teijin Kasei Kabushiki Kaisha), 20 November 2001 Full text; all drawings (Family: none)

Document 2: JP 9-96705 A (Dainippon Printing Co., Ltd.), 08 April 1997, Par. Nos. 0001, 0031 to 0032; Fig. 14 (Family: none)

Document 3: JP 11-326610 A (Nitto Denko Corp.), 26 November 1999, Full text; all drawings (Family: none)

The inventions in claims 1-10, 12, 13, 17-28, and 30 do not appear to involve an inventive step based on documents 1 and 2 cited in the ISR.

Document 1 describes an optical diffusing composition that is essentially the same as the inventions in claims 1-10, 12, 13, 17-28, and 30, made from an aromatic polycarbonate resin and polymer particles and including, as thermal stabilizers, a phosphate compound (including trimethylphosphate), a phosphate compound (including pentaerythritol diphosphate compounds), a phosphonite compound, and an ultraviolet absorber and fluorescent brightener.

Document 2 describes the general structure of a direct backlight type liquid crystal display device with a diffuser plate.

Here the selection of the type of thermal stabilizer could be obtained appropriately as required by a person skilled in the art. Thus the combination of document 1 and document 2 to produce the invention in claims 1-10, 12, 13, 17-28, and 30 would be easy for a person skilled in the art.

The inventions in claims 11 and 29 do not appear to involve an inventive step based on documents 1, 2, and 3 cited in the ISR.

Document 3 describes setting the thickness of the diffusion plate in a liquid crystal display device, or the like, as appropriate based on, for example, the desired strength of optical diffusion, and describes setting the thickness to between 1µm and 3mm.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2004/008766

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box V

Consequently, the adding of the general technical aspect described in document 3 to the invention in document 1 and document 2 to produce the invention according to claim 11 and 29 would be easy for a person skilled in the art.

The inventions in claims 14-16 are neither described nor suggested in any of the documents cited in the ISR nor found to be obvious to a person skilled in the art.